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SEQUENCE LISTING

<110> LARSEN, GLENN R.  
SAKO, DIANNE S.  
CHANG, XIAO-JIA  
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CUMMING, DALE  
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SHAW, GRAY

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 aactaccag tgggagcacc agaccacatc tctgtgaagc agtgctag 48

<210> 13  
 <211> 52  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 13  
 aattctagca ctgcttcaca gagatgtggt ctggtgctcc cactgggtag tt 52

<210> 14  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
         oligonucleotide  
  
 <400> 14  
 aactaccag tgggagcacc agaccacatc tctgtgaagc agtag 45  
  
 <210> 15  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
         oligonucleotide  
  
 <400> 15  
 aattctactg cttcacagag atgtggtctg gtgctccac tgggtagtt 49  
  
 <210> 16  
 <211> 52  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
         oligonucleotide  
  
 <400> 16  
 ctagaccgag gatggcatcc atgacaggag gacaacaaat ggtaggccgt ag 52  
  
 <210> 17  
 <211> 53  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
         oligonucleotide  
  
 <400> 17  
 aattctacgg cctaccatt tgttgcctc ctgtcatgga tgccatccg ggt 53  
  
 <210> 18  
 <211> 13  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 18

ctgcggccgc agt

13

<210> 19

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 19

ctagactgcg gccgcag

17

<210> 20

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 20

ccaggtccaa ctgcaggtcg actctagagg gcacttcttc tgggccacg

50

<210> 21

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 21

tattatctgt gcggccgcc tccagaaccc atggctgctg gttgcagtgg

50

<210> 22

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 22

tattatctgt gcggccgcgc agcaggctcc acagtggtag

40

<210> 23

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 23

tattatctgt gcggccgcgg aggctccgtt tctggcag

38

<210> 24

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 24

cggagacagg ccaccgaatt cctgccagaa acg

33

<210> 25

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 25

cctccagaaa tgctgaggca cagcactgac accactcctc

40

<210> 26

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 26

gagctggcca acatggggca actgtccacg gattcagcag

40

<210> 27  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 27  
 aattcgagtt cctagatttt g 21

<210> 28  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 28  
 aattcaaaat ctaggaactc g 21

<210> 29  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 29  
 aattcgagta cctagattat gatttcctgc cagaaactga gcctccgc 48

<210> 30  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 oligonucleotide

<400> 30  
 ggccgcggag gctcagtttc tggcaggaaa tcataatcta ggtactcg 48

<210> 31  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 31

aattcgagtt cctagattat gatttcctgc cagaaactga gcctccgc

48

<210> 32

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 32

ggccgcggag gctcagtttc tggcaggaaa tcataatcta ggaactcg

48

<210> 33

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 33

aattcgagtt cctagatttc gatttcctgc cagaaactga gcctccgc

48

<210> 34

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 34

ggccgcggag gctcagtttc tggcaggaaa tcgaaatcta ggaactcg

48

<210> 35

<211> 942

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
nucleotide construct



```

<400> 35
atgcctctgc aactcctcct gttgctgata ctactggggc ctggcaacag cttgcagctg 60
tgggacacct gggcagatga agccgagaaa gccttgggtc ccctgcttgc ccgggaccgg 120
agacaggcca ccgaatatga gtacctagat tatgatttcc tgccagaaac ggagcctcca 180
gaaatgctga ggaacagcac tgacaccact cctctgactg ggcctggaac ccctgagtct 240
accactgtgg agcctgctgc gcggccgcac acatgcccac cgtgcccagc acctgaagcc 300
ctggggggcac cgtcagtcct cctcttcccc ccaaaaccca aggacaccct catgatctcc 360
cggacccctg aggtcacatg cgtgggtgtg gacgtgagcc acgaagaccc tgaggtcaag 420
ttcaactggt acgtggacgg cgtggaggtg cataatgcca agacaaagcc gcgggaggag 480
cagtacaaca gcacgtaccg tgtggtcagc gtcctcaccc tcctgcacca ggactggctg 540
aatggcaagg agtacaagtg caaggtctcc aacaaagccc tcccagtcct catcgagaaa 600
accatctcca aagccaaagg gcagccccga gaaccacagg tgtacaccct gcccccatcc 660
cgggaggaga tgaccaagaa ccaggtcagc ctgacctgcc tgggtcaaagg cttctatccc 720
agcgacatcg ccgtggagtg ggagagcaat gggcagccgg agaacaacta caagaccacg 780
cctcccgtgc tggactccga cggtctcttc ttctctata gcaagctcac cgtggacaag 840
agcaggtggc agcaggggaa cgtcttctca tgctccgtga tgcattgaggc tctgcacaac 900
cactacacgc agaagagcct ctccctgtcc ccgggtaaat ga 942

```

<210> 36

<211> 313

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
fusion protein

<400> 36

```

Met Pro Leu Gln Leu Leu Leu Leu Leu Ile Leu Leu Gly Pro Gly Asn
 1              5              10              15

Ser Leu Gln Leu Trp Asp Thr Trp Ala Asp Glu Ala Glu Lys Ala Leu
 20              25              30

Gly Pro Leu Leu Ala Arg Asp Arg Arg Gln Ala Thr Glu Tyr Glu Tyr
 35              40              45

Leu Asp Tyr Asp Phe Leu Pro Glu Thr Glu Pro Pro Glu Met Leu Arg
 50              55              60

Asn Ser Thr Asp Thr Thr Pro Leu Thr Gly Pro Gly Thr Pro Glu Ser
 65              70              75              80

Thr Thr Val Glu Pro Ala Ala Arg Pro His Thr Cys Pro Pro Cys Pro
 85              90              95

Ala Pro Glu Ala Leu Gly Ala Pro Ser Val Phe Leu Phe Pro Pro Lys
100              105              110

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
115              120              125

Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
130              135              140

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
145              150              155              160

```

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His  
 165 170 175  
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys  
 180 185 190  
 Ala Leu Pro Val Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln  
 195 200 205  
 Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met  
 210 215 220  
 Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro  
 225 230 235 240  
 Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn  
 245 250 255  
 Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu  
 260 265 270  
 Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val  
 275 280 285  
 Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln  
 290 295 300  
 Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 305 310

&lt;210&gt; 37

&lt;211&gt; 810

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

 <223> Description of Artificial Sequence: Synthetic  
 nucleotide construct

&lt;400&gt; 37

```

atgcctctgc aactcctoct gttgctgata ctactggggc ctggcaacag cttgcagctg 60
tgggacacct gggcagatga agccgagaaa gccttgggtc ccctgcttgc cggggaccgg 120
agacaggcca ccgaatatga gtacctagat tatgatttcc tgccagaaac ggagcctcca 180
gaaatgctga ggaacagcac tgacaccact cctctgactg ggccctggaac ccctgagtct 240
accactgtgg agcctgctgc gcgggcgctg tgtgccaacc tagtaccggt gcccatcacc 300
aacgccaccc tggaccagat cactggcaag tggttttata tcgcacgggc ctttcgaaac 360
gaggagtaca ataagtcggt tcaggagatc caagcaacct tcttttactt caccaccaac 420
aagacagagg acacgatctt tctcagagag taccagaccc gacaggacca gtgcatctat 480
aacaccacct acctgaatgt ccagcgggaa aatgggacca tctcagata cgtgggaggg 540
caagagcatt tcgctcactt gctgatcctc agggacacca agacctacat gcttgctttt 600
gacgtgaacg atgagaagaa ctgggggctg tctgtctatg ctgacaagcc agagacgacc 660
aaggagcaac tgggagagtt ctacgaagct ctcgactgct tgcgcattcc caagtcagat 720
gtcgtgtaca ccgattggaa aaaggataag tgtgagccac tggagaagca gcacgagaag 780
gagaggaaac aggaggaggg ggaatcctag

```

&lt;210&gt; 38

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
fusion protein

&lt;400&gt; 38

```

Met Pro Leu Gln Leu Leu Leu Leu Ile Leu Leu Gly Pro Gly Asn
 1           5           10           15

Ser Leu Gln Leu Trp Asp Thr Trp Ala Asp Glu Ala Glu Lys Ala Leu
          20           25           30

Gly Pro Leu Leu Ala Arg Asp Arg Arg Gln Ala Thr Glu Tyr Glu Tyr
          35           40           45

Leu Asp Tyr Asp Phe Leu Pro Glu Thr Glu Pro Pro Glu Met Leu Arg
 50           55           60

Asn Ser Thr Asp Thr Thr Pro Leu Thr Gly Pro Gly Thr Pro Glu Ser
 65           70           75           80

Thr Thr Val Glu Pro Ala Ala Arg Pro Leu Cys Ala Asn Leu Val Pro
          85           90           95

Val Pro Ile Thr Asn Ala Thr Leu Asp Gln Ile Thr Gly Lys Trp Phe
          100          105          110

Tyr Ile Ala Ser Ala Phe Arg Asn Glu Glu Tyr Asn Lys Ser Val Gln
          115          120          125

Glu Ile Gln Ala Thr Phe Phe Tyr Phe Thr Pro Asn Lys Thr Glu Asp
          130          135          140

Thr Ile Phe Leu Arg Glu Tyr Gln Thr Arg Gln Asp Gln Cys Ile Tyr
          145          150          155          160

Asn Thr Thr Tyr Leu Asn Val Gln Arg Glu Asn Gly Thr Ile Ser Arg
          165          170          175

Tyr Val Gly Gly Gln Glu His Phe Ala His Leu Leu Ile Leu Arg Asp
          180          185          190

Thr Lys Thr Tyr Met Leu Ala Phe Asp Val Asn Asp Glu Lys Asn Trp
          195          200          205

Gly Leu Ser Val Tyr Ala Asp Lys Pro Glu Thr Thr Lys Glu Gln Leu
          210          215          220

Gly Glu Phe Tyr Glu Ala Leu Asp Cys Leu Arg Ile Pro Lys Ser Asp
          225          230          235          240

Val Val Tyr Thr Asp Trp Lys Lys Asp Lys Cys Glu Pro Leu Glu Lys
          245          250          255

```

Gln His Glu Lys Glu Arg Lys Gln Glu Glu Gly Glu Ser  
 260 265

<210> 39  
 <211> 1314  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 nucleotide construct

<400> 39  
 atggtggcgc ggaccgcgtg tcttctagcg ttgctgcttc cccagggtcct cctggggcggc 60  
 gcggctggcc tcgttcgcga gctggggcgc aggaagttcg cggcggcgctc gtcggggcgc 120  
 ccctcatccc agccctctga cgaggctcctg agcgagttcg agttgcgggt gctcagcatg 180  
 ttcggcctga aacagagacc caccgccagc agggacgccg tggtgcccc ctacatgcta 240  
 gacctgtatc gcaggcactc aggtcagccg ggctcaccgc cccagacca cgggttgag 300  
 agggcagcca gccgagccaa cactgtgctc agcttccacc atgaagaatc tttggaagaa 360  
 ctaccagaaa cgagtgggaa aacaaccgcg agattcttct ttaatttaag ttctatcccc 420  
 acggaggagt ttatcacctc agcagagctt caggttttcc gagaacagat gcaagatgct 480  
 ttaggaaaca atagcagttt ccatcaccga attaataatt atgaaatcat aaaacctgca 540  
 acagccaact cgaaattccc cgtgaccaga cttttggaca ccaggttggt gaatcagaat 600  
 gcaagcaggt gggaaagttt tgatgtcacc ccgctgtga tgcggtggac tgcacagga 660  
 cacgccaacc atggattcgt ggtggaagtg gccacttgg aggagaaaca aggtgtctcc 720  
 aagagacatg ttaggataag caggtctttg caccaagatg aacacagctg gtcacagata 780  
 aggccattgc tagtaacttt tggccatgat ggaaaagggc atcctctcca caaaagagaa 840  
 aaacgtcagg ccaccgaata tgagtaccta gattatgatt tctgcccaga aacggagcct 900  
 ccagaaatgc tgaggaacag cactgacacc actcctctga ctgggcctgg aaccttgag 960  
 tctaccactg tggagcctgc tgcaaggcgg aaacgcctta agtccagctg taagagacac 1020  
 cctttgtacg tggacttcag tgacgtgggg tggaaatgact ggattgtggc tccccgggg 1080  
 tatcacgcct tttactgcca cggagaatgc ccttttctc tggctgatca tctgaactcc 1140  
 actaatcatg ccattgttca gacgttggtc aactctgtta actctaagat tcctaaggca 1200  
 tgctgtgtcc cgacagaact cagtgtatc tcgatgtgt accttgacga gaatgaaaag 1260  
 gttgtattaa agaactatca ggacatggt gtggagggtt gtgggtgtcg ctgag 1314

<210> 40  
 <211> 437  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 fusion protein

<400> 40  
 Met Val Ala Gly Thr Arg Cys Leu Leu Ala Leu Leu Leu Pro Gln Val  
 1 5 10 15  
 Leu Leu Gly Gly Ala Ala Gly Leu Val Pro Glu Leu Gly Arg Arg Lys  
 20 25 30  
 Phe Ala Ala Ala Ser Ser Gly Arg Pro Ser Ser Gln Pro Ser Asp Glu  
 35 40 45

Val	Leu	Ser	Glu	Phe	Glu	Leu	Arg	Leu	Leu	Ser	Met	Phe	Gly	Leu	Lys	50	55	60
Gln	Arg	Pro	Thr	Pro	Ser	Arg	Asp	Ala	Val	Val	Pro	Pro	Tyr	Met	Leu	65	70	75
Asp	Leu	Tyr	Arg	Arg	His	Ser	Gly	Gln	Pro	Gly	Ser	Pro	Ala	Pro	Asp	85	90	95
His	Arg	Leu	Glu	Arg	Ala	Ala	Ser	Arg	Ala	Asn	Thr	Val	Arg	Ser	Phe	100	105	110
His	His	Glu	Glu	Ser	Leu	Glu	Glu	Leu	Pro	Glu	Thr	Ser	Gly	Lys	Thr	115	120	125
Thr	Arg	Arg	Phe	Phe	Phe	Asn	Leu	Ser	Ser	Ile	Pro	Thr	Glu	Glu	Phe	130	135	140
Ile	Thr	Ser	Ala	Glu	Leu	Gln	Val	Phe	Arg	Glu	Gln	Met	Gln	Asp	Ala	145	150	155
Leu	Gly	Asn	Asn	Ser	Ser	Phe	His	His	Arg	Ile	Asn	Ile	Tyr	Glu	Ile	165	170	175
Ile	Lys	Pro	Ala	Thr	Ala	Asn	Ser	Lys	Phe	Pro	Val	Thr	Arg	Leu	Leu	180	185	190
Asp	Thr	Arg	Leu	Val	Asn	Gln	Asn	Ala	Ser	Arg	Trp	Glu	Ser	Phe	Asp	195	200	205
Val	Thr	Pro	Ala	Val	Met	Arg	Trp	Thr	Ala	Gln	Gly	His	Ala	Asn	His	210	215	220
Gly	Phe	Val	Val	Glu	Val	Ala	His	Leu	Glu	Glu	Lys	Gln	Gly	Val	Ser	225	230	235
Lys	Arg	His	Val	Arg	Ile	Ser	Arg	Ser	Leu	His	Gln	Asp	Glu	His	Ser	245	250	255
Trp	Ser	Gln	Ile	Arg	Pro	Leu	Leu	Val	Thr	Phe	Gly	His	Asp	Gly	Lys	260	265	270
Gly	His	Pro	Leu	His	Lys	Arg	Glu	Lys	Arg	Gln	Ala	Thr	Glu	Tyr	Glu	275	280	285
Tyr	Leu	Asp	Tyr	Asp	Phe	Leu	Pro	Glu	Thr	Glu	Pro	Pro	Glu	Met	Leu	290	295	300
Arg	Asn	Ser	Thr	Asp	Thr	Thr	Pro	Leu	Thr	Gly	Pro	Gly	Thr	Pro	Glu	305	310	315
Ser	Thr	Thr	Val	Glu	Pro	Ala	Ala	Arg	Arg	Lys	Arg	Leu	Lys	Ser	Ser	325	330	335
Cys	Lys	Arg	His	Pro	Leu	Tyr	Val	Asp	Phe	Ser	Asp	Val	Gly	Trp	Asn	340	345	350

[illegible]

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<210> 41
<211> 795
<212> DNA
<213> Artificial Sequence
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<220>  
<223> Description of Artificial Sequence: Synthetic nucleotide construct

<400> 41						
atgcctctgc	aactcctcct	gttgetgata	ctactgggcc	ctggcaacag	cttgcagctg	60
tgggacacct	gggcagatat	agccagagaaa	gccttgggtc	ccctgcttgc	ccgggacctg	120
agacaggcca	cgaatatga	gtacctagat	tatgatttcc	tgccagaaac	ggagctctca	180
gaaatgctga	ggaacagcac	tgacaccagt	cctctgactg	ggcctggaac	ccttgagtcc	240
accactgtgg	agcctgctgc	goggccgccca	cctggccccc	ctcgagtttc	cccagacctt	300
cgggcccagc	tggacagcac	cgtgctcctg	accgcctctc	tcctggcgga	cacgcggcag	360
ctggctgcac	agctgaggga	caaattccca	gctgacgggg	accacaacct	ggattccctg	420
cccacctctg	ccatgagtgc	gggggcactg	ggagctctac	agctcccagc	tgtgctgaca	480
aggctgcgag	cggacctact	gctcctacctg	cggcacgtgc	atggcttgcg	cggggcaggt	540
ggctcttccc	tgaagacctt	ggagcccgag	ctggggcacc	tgcaggcccg	actggaccgg	600
ctgctgcgcc	ggctgcagct	cctgatgtcc	cgcttggccc	tgccccagcc	acccccggac	660
cgcgccgcgc	ccccgctggc	gccccctctc	tcagcctggg	ggggcatcag	ggccgcccac	720
ggcatccttg	ggggctgtga	cctgacactt	gactgggcgg	tgaggggact	gctgctgctg	780
aagactcggc	tgtga					795

```
<210> 42
<211> 264
<212> PRT
<213> Artificial Sequence
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<220>  
<223> Description of Artificial Sequence: Synthetic fusion protein

```

<400> 42
Met  Pro  Leu  Gln  Leu  Leu  Leu  Leu  Leu  Ile  Leu  Leu  Gly  Pro  Gly  Asn
  1              5              10              15

```

Ser Leu Gln Leu Trp Asp Thr Trp Ala Asp Glu Ala Glu Lys Ala Leu  
                     20                    25                    30  
 Gly Pro Leu Leu Ala Arg Asp Arg Arg Gln Ala Thr Glu Tyr Glu Tyr  
                     35                    40                    45  
 Leu Asp Tyr Asp Phe Leu Pro Glu Thr Glu Pro Pro Glu Met Leu Arg  
                     50                    55                    60  
 Asn Ser Thr Asp Thr Thr Pro Leu Thr Gly Pro Gly Thr Pro Glu Ser  
                     65                    70                    75                    80  
 Thr Thr Val Glu Pro Ala Ala Arg Pro Pro Pro Gly Pro Pro Arg Val  
                     85                    90                    95  
 Ser Pro Asp Pro Arg Ala Glu Leu Asp Ser Thr Val Leu Leu Thr Arg  
                     100                    105                    110  
 Ser Leu Leu Ala Asp Thr Arg Gln Leu Ala Ala Gln Leu Arg Asp Lys  
                     115                    120                    125  
 Phe Pro Ala Asp Gly Asp His Asn Leu Asp Ser Leu Pro Thr Leu Ala  
                     130                    135                    140  
 Met Ser Ala Gly Ala Leu Gly Ala Leu Gln Leu Pro Gly Val Leu Thr  
                     145                    150                    155                    160  
 Arg Leu Arg Ala Asp Leu Leu Ser Tyr Leu Arg His Val Gln Trp Leu  
                     165                    170                    175  
 Arg Arg Ala Gly Gly Ser Ser Leu Lys Thr Leu Glu Pro Glu Leu Gly  
                     180                    185                    190  
 Thr Leu Gln Ala Arg Leu Asp Arg Leu Leu Arg Arg Leu Gln Leu Leu  
                     195                    200                    205  
 Met Ser Arg Leu Ala Leu Pro Gln Pro Pro Pro Asp Pro Pro Ala Pro  
                     210                    215                    220  
 Pro Leu Ala Pro Pro Ser Ser Ala Trp Gly Gly Ile Arg Ala Ala His  
                     225                    230                    235                    240  
 Ala Ile Leu Gly Gly Leu His Leu Thr Leu Asp Trp Ala Val Arg Gly  
                     245                    250                    255  
 Leu Leu Leu Leu Lys Thr Arg Leu  
                     260

<210> 43

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 43

Gln Ala Thr Glu Tyr Glu Tyr Leu Asp Tyr Asp Phe Leu Pro Glu Cys  
 1 5 10 15

<210> 44

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 44

Ser Tyr Leu Asp Tyr Ser  
 1 5

<210> 45

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 45

Ser Phe Leu Asp Tyr Ser  
 1 5

<210> 46

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 46

Arg Asp Arg Arg  
 1

<210> 47

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic amino acid consensus sequence



<220>  
 <221> MOD\_RES  
 <222> (2)  
 <223> Thr or Met

<220>  
 <221> MOD\_RES  
 <222> (8)  
 <223> Pro, Ala, Gln, Glu, or Arg

<220>  
 <221> MOD\_RES  
 <222> (9)  
 <223> Pro or Leu

<220>  
 <221> MOD\_RES  
 <222> (10)  
 <223> Ala or Thr

<400> 47  
 Ala Xaa Glu Ala Gln Thr Thr Xaa Xaa Xaa  
       1                  5                  10

<210> 48  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

<400> 48  
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                   20                  25                  30